

- 16 -

C L A I M S

1. A method for suppressing fluid communication to or from a wellbore in a subsurface formation, which method comprises:
- 5 - providing a well fluid which comprises solid particles in a carrying fluid, which solid particles include a reactive polymer;
 - 10 - introducing the well fluid into the wellbore so that carrier fluid passes through an interface between the wellbore and its surroundings, wherein particles are accumulated at the interface; and
 - allowing the polymer to form a solid plug suppressing fluid communication through the interface.
2. The method according to claim 1, wherein the interface is formed by one of the group consisting of a
- 15 perforation in the formation, a fracture in the formation, and a cement irregularity between a metal casing and the formation.
3. The method according to claim 1 or 2, wherein the polymer is a thermosetting polymer composition, for
- 20 example selected from the group consisting of a phenolic resin composition, a polyester resin composition, an epoxy resin composition, and polyurethane composition.
4. The method according to claim 3, wherein the polymer is an epoxy resin composition comprising an epoxy resin,
- 25 a curing agent, and optionally an accelerator, catalyst and/or filler material.
5. The method according to any one of claims 1-4, wherein a cooling fluid is introduced into the wellbore prior to introducing the well fluid with reactive polymer
- 30 particles.

- 17 -

6. The method according to any one of claims 1-5, wherein a heating fluid is introduced into the wellbore prior to introducing the well fluid with polymer particles.

5 7. The method according to any one of claims 1-6, wherein the subsurface formation is subsequently selectively re-perforated.

8. A well fluid for use in a wellbore, which well fluid comprises solid particles in a carrying fluid, which
10 solid particles include a reactive polymer.

9. The well fluid according to claim 8, wherein the reactive polymer comprises an epoxy resin composition comprising an epoxy resin, a curing agent, and optionally an accelerator, catalyst and/or filler material.